SECTION V POTENTIAL IMPACTS AND MITIGATION MEASURES

A. Physical Resources

1. Geology

Bedrock is at or near the ground surface in many locations in the Gore Mountain Intensive Use Area.

Bedrock may be encountered when constructing a portion of the dedicated shuttle lane. There is an area of Lyman-Rock Outcrop soils between parking lot E and the base lodge. It may be necessary to blast some bedrock to create the shuttle lane through this area. It is also possible that blasting may be necessary as part of some of the trail creation or trail widening management actions. Bedrock may also be encountered when enlarging the snowmaking reservoir which could also necessitate blasting. Hermon-Lyman-Rock Outcrop soils are mapped on the north and south sides of the reservoir.

As described previously in Section 2, the landform that is Gore Mountain, including the Barton garnet mine that is located on the north side of the mountain, is considered a unique geologic feature (http://www.dec.ny.gov/permits/53858.html). These deposits will not be affected by the construction activities associated with the shuttle lane or the snowmaking reservoir which are both located at low elevations on the mountain.

Mitigation Measures

ORDA will employ the services of a professional, licensed and insured blasting company to perform any needed blasting. Blasters in New York State are required to possess a valid NY State Department of Labor issued Explosive License and Blaster Certificate of Competence. The Explosives License permits the licensee to purchase, own, possess or transport explosives. The Blaster Certificate of Competence permits the use of explosives.

If it is determined that blasting will be required, a written blasting plan will be developed and approved prior to the commencement of blasting. In general, the blast plan will contain information about the blasting methods to be employed, measures to be taken to protect the safety of the public, and how the applicable rules and regulations will be complied with. If, during the evolution of the project, there are significant changes in the blast design a new blast plan will be required. A test shot will be required for the first shot after the approval of each blast plan.

While each blast plan is tailored to meet the specific needs of a particular project, they all contain certain elements. Typically the general information provided will include: the blasting contractor; the project blaster; locations of blasting; the duration of blasting operations;

locations of offsite receptors; location of any nearby utilities; the drill hole pattern; the explosives and detonation systems to be employed; the proposed loading of the holes; the maximum weight of explosives to be detonated in any delay period; measures to be taken to minimize the offsite impacts of blasting; traffic control and warning signs; the sequence and type of blasting warning signals; location of seismographs to monitor blast induced vibrations; what, if any local permits are required; will pre-blast surveys be performed, and if so where; and other information as necessary.

In addition, prior to the commencement of blasting, a pre-blast meeting will be held with the blaster, project manager, and other interested parties.

A record of each blast should be made by the blaster, and a copy provided to and retained by the project, which contains at a minimum the following information:

- Name of the operator and/or contractor conducting the blast.
- The location, date and time of the blast.
- Name, signature and identification number of the blaster (certificate of competency number, as issued by the Department of Labor).
- Type of material to be blasted.
- Diagram of shot including number of holes, depth of holes, diameter of holes, burden, spacing, and face orientation.
- Location and distance of nearest non-company owned structure.
- A record of the shot including amount of subdrilling, decking, stemming height and type, quantity and type of explosive, quantity and type of detonator, weather conditions (including wind speed and direction), type of initiation system and all delay periods progressively, in milliseconds. A drill log reviewed and signed by the licensed blaster and company supervisor including date, time, location, shot number, number of holes, hole depth, average face height, burden, spacing, diameter and any potential problem areas such as seams, cracks, voids and water.

The following techniques and control measures will be considered in blast design to reduce ground vibration:

- Adjusting the blast hole pattern
- Reducing the pounds of explosive per delay:
    - use of smaller diameter blast holes
    - reduce bench height
    - use of decking
- Avoiding overly confined charges (e.g. excessive burden).
- Avoiding excessive subdrilling.

- Strict control over spacing and orientation of blast holes.
- Borehole deviation monitoring.
- If possible, designing the blast sequence to direct vibration away from structures of concern.

A properly designed blast will give lower vibrations per pound of explosive. Close to the blast, the ground vibration character is affected by factors of blast design and rock geometry, particularly charge weight per delay, delay interval, and to some extent direction of initiation, burden, and spacing.

Additionally, to reduce the public's concern regarding ground vibrations:

- Blasts will be scheduled for the same time of day whenever possible.
- Blasts will be scheduled for periods of high local activity.
- Blasts will not be scheduled for quiet periods.
- Neighbors will be notified of the blast schedule in advance.

2. Soils

Potential Impacts

Soil Erodibility (K) Factors were discussed previously in Section 2.A.1.b. "K" is one factor used to calculate potential soil loss using the Revised Universal Soil Loss Equation (RUSLE). Other factors in RUSLE include slope length (L) and slope steepness (S).

See **Figure** 28, Soils Map and Management Actions.

Construction of most new Management Actions is proposed on soils with an "E" slope category. E soils are described as steep. Some new management actions are proposed on soils with a "C" slope category. C soils are described as sloping (Soils Survey of Warren County, 1989)

Disturbance of areas of steep slopes during construction can lead to an increased vulnerability of the soils to erosion. Suitable measures must be implemented to first prevent soil erosion and then second to make sure that any soils that are eroded are contained and prevented from causing sedimentation in receiving waters.

ORDA will implement proper erosion and sediment control practices when undertaking construction practices at their venues that oftentimes involve construction on steep slopes. These proper practices are set forth in the *New York State Standards and Specifications for Erosion and Sediment Control* (last updated November 2016). These standards and specifications will be used to develop Stormwater Pollution Prevention Plans (SWPPPs) for construction activities in accordance with NYSDEC's *SPDES General Permit for Stormwater Discharge from Construction Activity, GP-0-15-002.*

Gore Mountain Intensive Use Area

GORE MOUNTAIN INTENSIVE USE AREA LAND REQUESTED TO BE CLASSIFIED WILDERNESS (CONCEPTUAL ACTION)

TRAIL WIDENING

NEW LIFT 9B, BEGINNER TRIPLE OR QUAD CHAIR LIFT

RECONFIGURE MAINTENANCE AREA TO LOCATE GROOMER GARAGE & FUELING ADJACENT TO EXISTING SKI TRAIL

RECONFIGURE DROP OFF AREA TO ACCOMMODATE SHUTTLE LOOP

EXPANSION OF NYSEF BUILDING

TRAIL WIDENING

NEW TRAIL

NEW TRAIL

ENLARGE SNOWMAKING RESERVOIR

VANDERWHACKER MOUNTAIN WILD FOREST LAND REQUESTED TO BE RECLASSIFIED INTENSIVE USE AREA (CONCEPTUAL ACTION)

NEW TRAIL

CONVERT EXISTING HALF & HALF GLADE TO TRAIL 12-0

REPLACE LIFT 12 WITH A HIGH SPEED QUAD & RELOCATE

NOTE: PROPOSED ACTIONS ON TOWN-OWNED LANDS AND VANDERWHACKER MOUNTAIN WILD FOREST ARE INCLUDED IN THIS UMP FOR REFERENCE ONLY.

Legend

- Gore Mountain Intensive Use Area
- SSURGO Soil Type Boundary
- Proposed Action

LABEL	SOIL TYPE	LABEL	SOIL TYPE
BdC	Bice very bouldery fine sandy loam, sloping	HpC	Hinckley-Plainfield complex, sloping
BdE	Bice very bouldery fine sandy loam, steep	HpE	Hinckley-Plainfield complex, steep
Fu	Fluvaquents-Udifluvents complex, frequently flooded	LmC	Lyman-Rock outcrop complex, sloping
HeC	Hermon very bouldery fine sandy loam, sloping	LmE	Lyman-Rock outcrop complex, steep
HeE	Hermon very bouldery fine sandy loam, steep	MrC	Marlow very bouldery fine sandy loam, sloping
HmC	Hermon-Lyman-Rock outcrop complex, sloping	MrE	Marlow very bouldery fine sandy loam, steep
HmE	Hermon-Lyman-Rock outcrop complex, steep	PlC	Plainfield loamy sand, 8 to 15 percent slopes
HnB	Hinckley cobbly sandy loam, 3 to 8 percent slopes	W	Water
HnC	Hinckley cobbly sandy loam, 8 to 15 percent slopes	Wa	Wareham loamy sand

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Project Title:

Gore Mountain: 2018 Unit Management Plan Amendment & Final Generic Environmental Impact Statement

Drawing Title

Soils Map and Management Actions

1 inch = 1,500 feet

0 750 1,500

Feet

Date: 05/11/2018

Project No: 201537

Drawing No:

28

SWPPPS will detail those measures that will be implemented during construction to mitigate potential soil erosion and surface water sedimentation. SWPPP content will include such things as construction sequencing and phasing, temporary and permanent stabilization, structural erosion control practices and vegetative control practices. SWPPPs will include provisions for monitoring, inspections, data collection, and compliance documentation.

Mitigation measures that ORDA commonly and successfully employs during ski area construction activities include the following that will be incorporated into pre-construction SWPPP plans and specifications.

Mitigation Measures

Construction Road Stabilization – site access will be achieved using existing work roads, ski trails, driveways and parking areas. At this time, no new disturbance is anticipated for site access, material storage areas or other construction uses.

Concrete Washout – Concrete truck washouts will be provided in existing parking areas located in proximity to the Base Area.

Protecting Vegetation to Remain – clearing limits will be marked with flagging tape, paint or other suitable means prior to the felling of trees for lift line and ski trail construction. ORDA is particularly sensitive to adhering to clearing limits on the Forest Preserve lands on which they operate their venues.

Runoff Control

- **Water Bars** – Water bars shall be installed during construction of the ski slopes and lift lines. They are to be placed across the slope to reduce the potential for erosion, with diversion into stable vegetated areas or other stabilized outlet. All water bars shall be installed at a 2% slope and particular attention shall be paid to proper spacing specifications as follows:

Slope (%)	Water Bar Spacing (ft.)
<5	125
5 to 10	100
10 to 20	75
20 to 35	50
>35	25

(Source: New York State Standards and Specifications for Erosion and Sediment Control, 2016)

Rock outlet protection using construction-generated rock will be installed at the ends of water bars when natural areas appear not to be adequate.

- **Trench Plugs** – Sand bags or gravel bags will be employed in open utility trenches longer than 300 feet. Compost filter socks of suitable size are an acceptable alternative to sand bags or gravel bags.

Soil Stabilization

- **Temporary Seeding** - Seed and mulch inactive areas with bare soil within 3 days of disturbance unless construction will resume in that area within 2 days. Seed with annual rye mixture at 30 pounds per acre**.** For late fall or early winter seeding seed with winter rye at a rate of 100 pounds per acre. Mulch areas with straw at a rate of 2 tons per acre.

- **Permanent Seeding and Mulching** - Maintain existing vegetation outside of marked limits of disturbance. Soils disturbed for construction of ski trails and lifts shall be permanently stabilized by successfully establishing an herbaceous ground cover.

  Seeding – A commercially available native seed mixture appropriate to the climate shall be used to stabilize disturbed areas to be re-vegetated. Seed may be applied by a number of suitable means including broadcasting, hydro-seeding, or incorporated as part of a geotextile (i.e. Green & Bio Tech SureTurf 1000 and 4000 Seeded Mat System ®, BIOMAT ® seeded mats).

  Mulching – Broadcast seeded areas shall also be mulched. Broadcast seeded areas shall be mulched with invasive species free hay or straw at a rate of 2 to 3 bales per thousand square feet (100-120 bales per acre). Mulch shall be secured in place by either driving over the mulched area with a tracked vehicle or by applying a non-asphaltic tackifier.

  Hydro-seeded areas shall contain a mix of wood cellulose mulch applied during the hydro-seeding process. Wood cellulose mulch shall be applied at a rate of 35 pounds per thousand square feet (2,000 pounds per acre). A non-asphaltic tackifier will be included with the hydro-mulch application.

Soil Restoration

As directed by the Qualified Inspector, areas of compacted soils that are to be seeded should be restored to improve the quality of the seed bed. The top four (4) to six (6) inches of soil shall be loosened using hand or mechanical means prior to applying seed. Also, as directed by the Qualified Inspector, finished grades consisting of exposed subsoils may require soil amendment or topsoil in order to provide a suitable seed bed.

Sediment Control

- **Silt Fence** – Where appropriate, silt fence (standard or reinforced) shall be installed along topographic contours. Use of silt fence is appropriate where there is no concentration of water flowing to the barrier and where the drainage area for overland flow does not exceed ½ acre per 100 feet of fence. Additionally, maximum allowable slope lengths contributing runoff to a silt fence shall be as follows:

Slope Steepness	Standard Maximum Slope Length (ft.)	Reinforced Maximum Slope Length (ft.)
<50:1	300	N/A
50:1 to 10:1	125	250
10:1 to 5:1	100	150
5:1 to 3:1	60	80
3:1 to 2:1	40	70
>2:1	20	30

(Source: New York State Standards and Specifications for Erosion and Sediment Control, 2016)

  - Silt fence structures should be installed anywhere sediment retention is needed in and around a construction site.
  - Perpendicular to slopes or parallel to contour.
  - At the toe of highly erodible slopes.
  - Around culverts and storm water drainage systems.
  - Adjacent to lakes, streams or creeks.

  Maintenance – Silt fences should be inspected periodically for damages such as tearing by equipment, animals, or wind and for the amount of sediment which has accumulated. Removal of the sediment is generally necessary when it reaches 1/3 the height of the silt fence. In situations where access is available, machinery can be used; otherwise, it must be removed manually. The key elements to remember are:

- The sediment deposits should be removed when heavy rain or high water is anticipated.
- The sediment removed should be placed in an area where there is no danger of erosion.
- The silt fence should not be removed until adequate vegetation ensures no further erosion of the disturbed slopes. Generally, the fabric is cut at ground level, the wire and posts removed, the sediment spread, and seeding and mulch is applied immediately.

Reinforced silt fence should be installed at the base of temporary stockpiles. The reinforced silt fence is designed to hold heavier loads. Falling debris from stockpiles may be caught by the reinforced silt fence where standard silt fence could fail.

- **Straw Bale Dikes** – Straw bale dikes may be used as a substitute for silt fence ONLY where shallow depth to rock precludes the proper installation of silt fence. Straw bale dikes shall NOT be used where there is concentrated flow. Straw bale dikes shall NOT be used where more than 3 months of erosion and sediment control is required unless bales are replaced or an additional parallel row of bales is installed prior to the original straw bales being in place for 3 months. Length of slope above the straw bale dike shall not exceed the following:

Slope Steepness	Maximum Slope Length (ft.)
2:1	25
3:1	50
4:1	75

(Source: New York State Standards and Specifications for Erosion and Sediment Control, 2016)

Straw bale dikes require more maintenance and degrade much more rapidly. Straw bale dikes offer a more standalone practice that may be less dependent on the required staking. Staking is required for both silt fence and straw bale dikes. Both practices are required to be buried in the ground, although silt fence is required a six inch burial as opposed to a four inch burial trench for straw bale dikes. If neither application is applicable, sediment may be captured by using aproned Triangular Silt Dikes.

Installation specifications:

- Each bale shall be embedded in the soil a minimum of 4 inches.
- Bales shall be placed in a row with ends tightly abutting the adjacent bales.
- Bales shall be securely anchored in place by stakes driven through the bales. The first stake in each bale shall be driven toward the previously laid bale to force bales together.
- Inspection shall be frequent, and repair or replacement shall be made promptly as needed.

Ski Trail Construction

Erosion and sediment control practices for trail construction will be conducted similarly as it has been done in previous trail construction projects with much success. ORDA staff is experienced in ski trail and lift construction including erosion control techniques. They will use the following measures to mitigate the potential impacts of trail

construction.

- Limit individual disturbance areas to less or equal to 1 acre at any time.
- Tree trunks will be removed and used on site either as part of trail construction or cut up and used for firewood.
- Logs will be used on constructed trails to create cribbing to help stabilize the down gradient slope.
- Where possible, tree stumps will be cut flush to the ground to minimize the impact to the existing root systems and to allow the quick establishment of vegetation. Emphasis to minimize cutting, filling and grubbing operations on slopes over 25 percent will be made.
- Grubbed stumps will be buried within the trail as part of trail construction (filling low spots, etc.)
- Branches and tops will be chipped with chips broadcast into adjoining wooded areas. Chip piles shall not be created in wooded areas.
- Install sediment and erosion control practices.
- On constructed trails, which involved cut/fill operations, exposed earth areas will be contained by diverting clean runoff from the uphill side with water bars as much as practicable.
- Silt fence and/or chip berms on the downhill side will be utilized to filter the runoff from the raw site.
- During final grading, all water bars will be repaired in order to effectively intercept and divert water from new trails and lift areas.
- Areas where finish grade has been established will be seeded and mulched within 3 days. No areas shall be left with raw earth exposed for more than 7 days.

Lift Terminals Construction

Lift terminal construction is located in flat to low slope areas and are limited to approximately ¼ acre in size. E&SC practices include silt fence, upgradient water bars, and vegetative stabilization. RECP will be installed on the graded outruns of the upper lift terminals.

Lift Line Construction

The scope of lift line construction operations is similar, but less intense, than most trail clearing operations. Construction of the lift line corridors will involve:

- Cutting trees to provide a 60 feet wide area with sufficient clearance.
- Stumps are cut flush to the ground.

- Grading operations are limited to the areas immediately around lift tower footings and where vehicle access is required. In these locations E&SC practices include silt fence, upgradient water bars, and vegetative stabilization.
- Ground cover vegetation will be undisturbed to the extent possible.
- Areas requiring site disturbance will be stabilized using practices described above.
- Wooded areas which are cut will be allowed to naturally fill in with brushy type growth where no ski trails or service driveways are to be created.

Linear Utilities

Linear utilities include underground water pipe, air lines, and electric lines. Erosion from pipeline construction will be minimized by limiting the length of the open trench to 1200' for a period not to exceed 10 days. Sand or gravel bags trench plugs will be placed in sloped trenches at a minimum of 300' intervals to slow the velocity of stormwater runoff that may enter the trench.

Areas where finish grade has been established will be seeded and mulched within 3 days. No areas shall be left with raw earth exposed for more than 10 days.

3. Topography and Slope

Potential Impacts
See **Figure** 29, Topography and Management Actions.

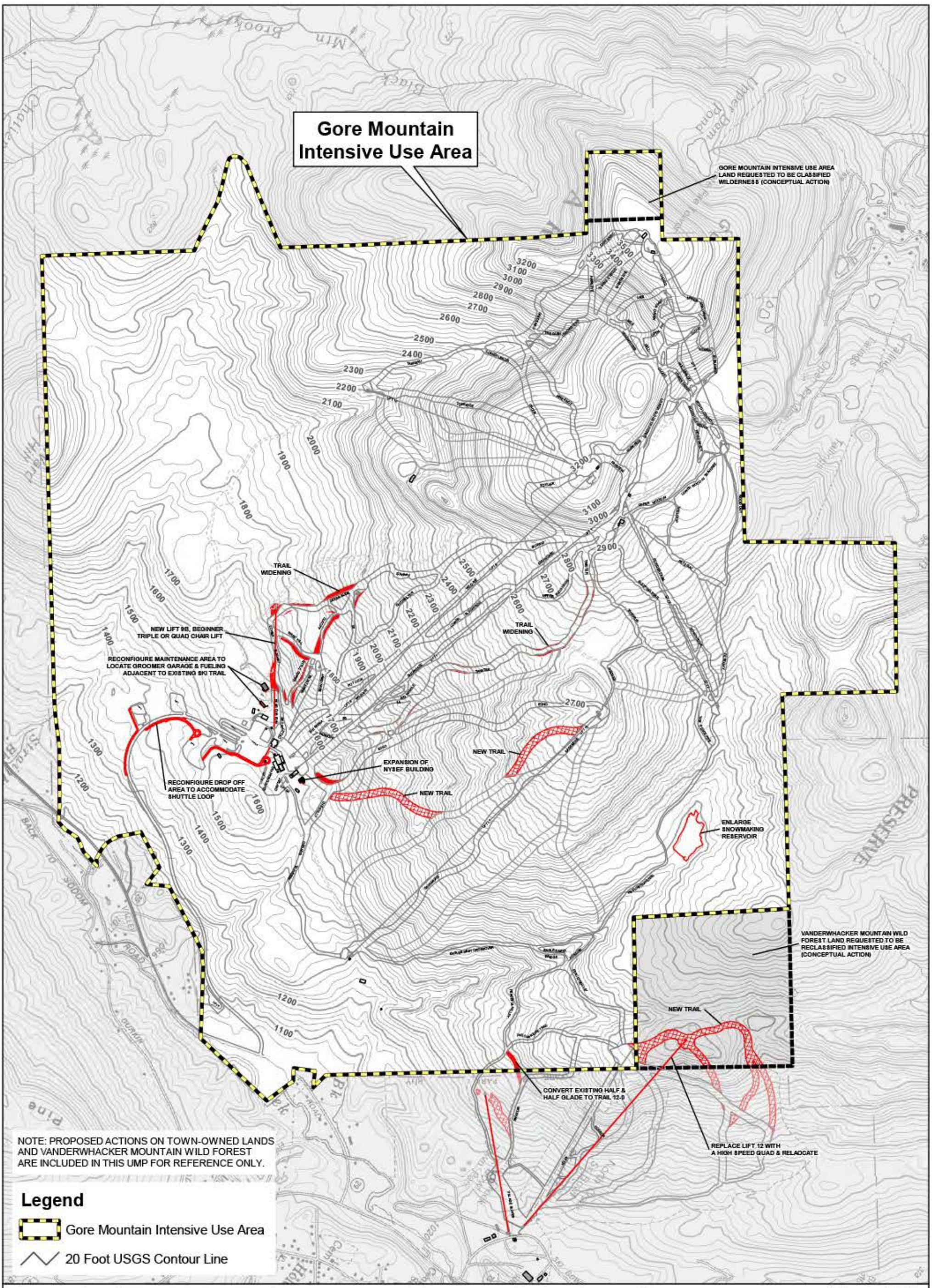
Very limited grading is required for new ski trails, trail widening or ski lifts. Trails are laid out to follow natural fall lines. Lift grading is limited to the upper and lower terminals and at the tower foundations.

Grading will be required to create the building pad for the groomer garage as well as for sections of the shuttle lane. See **Figure** 14 Master Plan – Approved and Proposed Actions (Base Lodge) and **Figure** 26, Shuttle Lane Plan.

Significant grading (excavation) is proposed for the enlargement of the snowmaking reservoir.

Impacts associated with grading involve erosion and sediment control (see the previous section) and protection of water resources (see the following sections).

Mitigation Measures
No mitigation measures beyond those described in the previous section and in the following section are required.



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Project Title:

Gore Mountain: 2018 Unit Management Plan Amendment & Final Generic Environmental Impact Statement

Drawing Title

Topography and Management Actions

1 inch = 1,500 feet

0 750 1,500

Feet

Date: 05/11/2018

Project No: 201537

Drawing No:

29

4. Water Resources

Potential Impacts

See **Figure** 30, Surface Water, Wetland Resources, and Proposed Actions.

Identified potential impacts to surface water are (1) sedimentation of eroded soils, (2) increased stormwater runoff with accompanying loadings (nutrients, dissolved solids, etc.), and (3) exposure of disturbed soils in the snowmaking reservoir expansion area along with separating clean inflow waters from the active construction areas during reservoir excavation.

Mitigation Measures

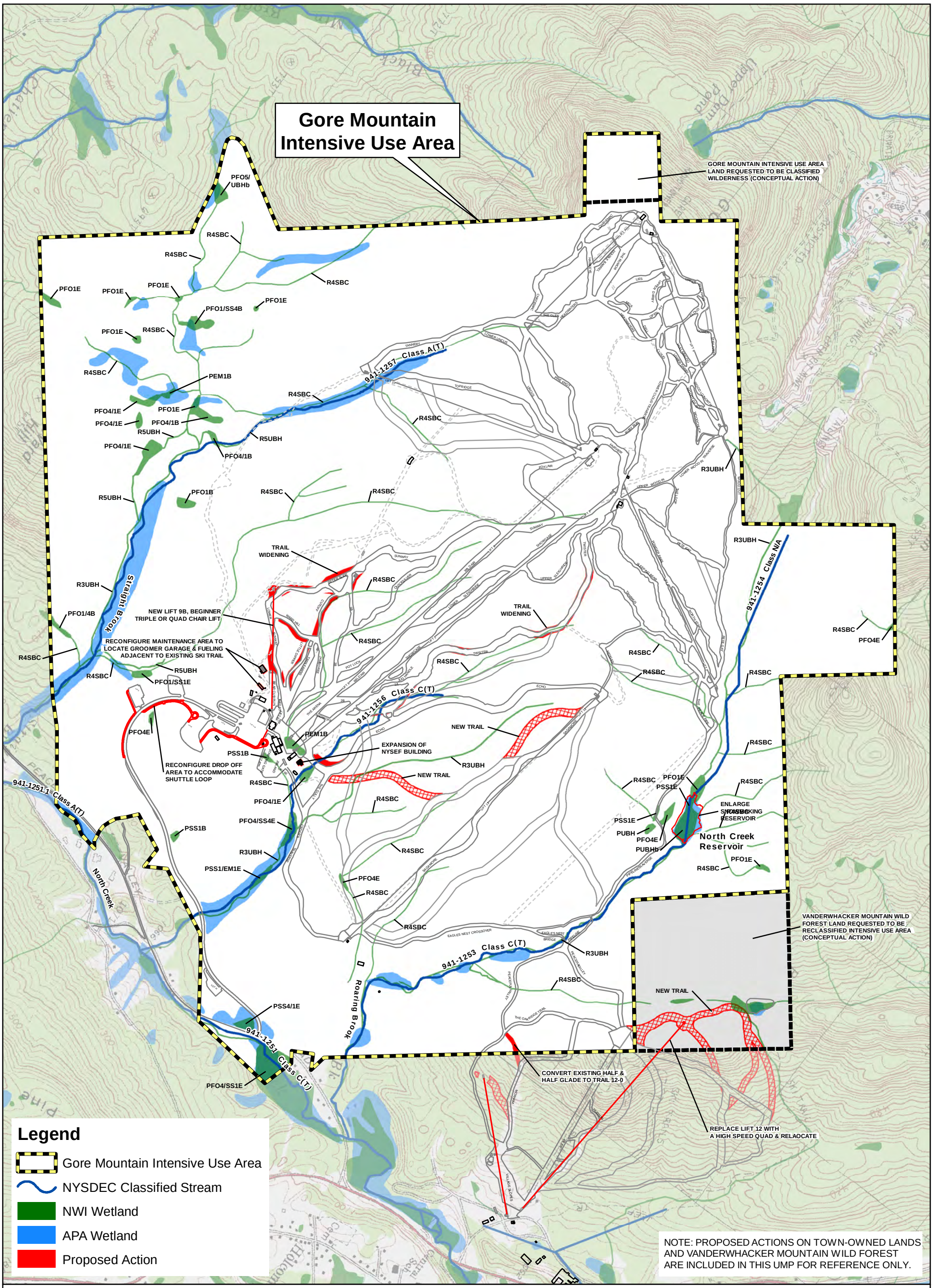
Those measures that will be implemented to prevent erosion and subsequent sedimentation were described previously in the Soils section.

The new management actions include only two actions that will introduce significant amounts of new impervious surfaces that will increase stormwater runoff. These are the new groomer garage and those portions of the shuttle lane that will be outside of existing parking areas and drives. A Stormwater Management Report has been prepared for these two actions. See **Appendix** 7.

The Project has been designed in accordance with Chapter 4 of the NYSDEC Stormwater Management Design Manual (SWMDM), and NYSDEC's General Permit GP-0-15-002 for construction activities. Stormwater calculations were performed utilizing widely accepted engineering methodologies, including TR-55, and the stormwater modeling computer program HydroCAD (version 10.00) produced by HydroCAD Software Solutions, LLC.

Under the watershed's proposed condition, all stormwater from the Project will continue to discharge to the same point as in the existing condition (Analysis Points 1 & 2). The total watershed has generally remained unchanged, as is shown on the drawing "W-2 Proposed Conditions Watershed Map" contained in **Appendix** 7. To meet NYSDEC requirements (see Section 5.0 NYSDEC Design Criteria in **Appendix** 7) a bioretention basin and wet swale have been incorporated into the stormwater management design to mitigate the quality and quantity of stormwater runoff discharged from the Project Site.

For the snowmaking reservoir expansion, see **Figure** 31, Snowmaking Reservoir Construction Sequencing. First the reservoir will be fully drained. See the photo below.



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Drawing Title

Surface Water, Wetland Resources, and Management Actions

1 inch = 1,500 feet

0 750 1,500

Feet

Date: 04/27/2018

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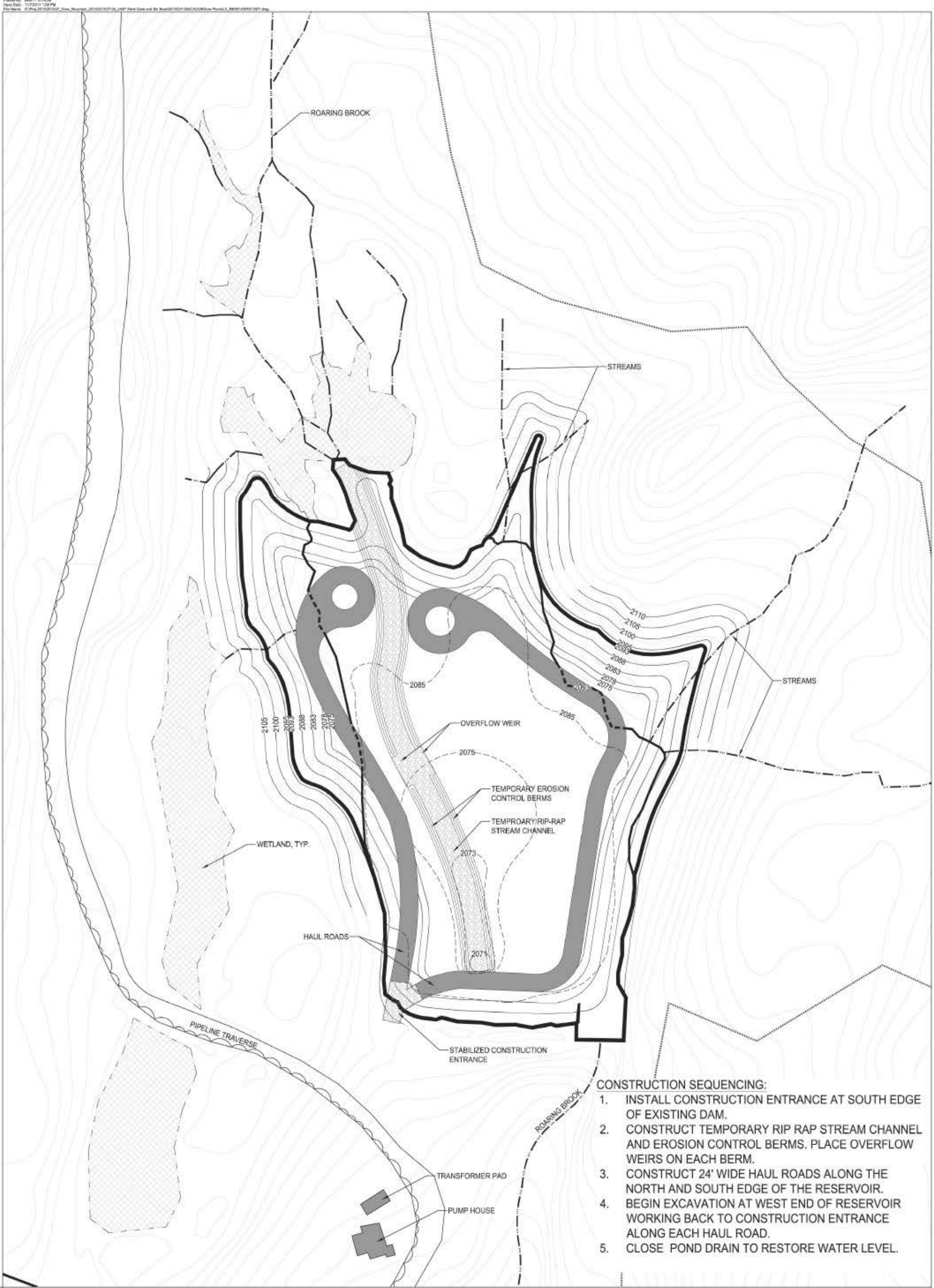
30



CONSTRUCTION SEQUENCING:

1. INSTALL CONSTRUCTION ENTRANCE AT SOUTH EDGE OF EXISTING DAM.
2. CONSTRUCT TEMPORARY RIP RAP STREAM CHANNEL AND EROSION CONTROL BERMS. PLACE OVERFLOW WEIRS ON EACH BERM.
3. CONSTRUCT 24' WIDE HAUL ROADS ALONG THE NORTH AND SOUTH EDGE OF THE RESERVOIR.
4. BEGIN EXCAVATION AT WEST END OF RESERVOIR WORKING BACK TO CONSTRUCTION ENTRANCE ALONG EACH HAUL ROAD.
5. CLOSE POND DRAIN TO RESTORE WATER LEVEL.

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Project Title:
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Drawing Title:
Snowmaking Reservoir Construction Sequencing

60 0 20 40 60
Scale: 1" = 60'

Date:	November 6, 2017
Scale:	1" =60'
Design:	MJT
Drawn:	KMK
Chk'd:	KJF
Project No.:	2015037

Drawing No.:
31

Mostly drained snowmaking reservoir September 9, 2017

Once the reservoir is drained a haul road stabilized outlet will be created in the southeast corner of the reservoir where remnants of a haul road currently exist. Next, a rip rap stream channel will be constructed to convey water from the main reservoir stream inlet to the outlet structure. The intent is to isolate and pass through reservoir inflow from the inlet while the reservoir is being excavated. Two 24 foot wide haul roads would then be constructed in order to remove excavated materials from the north and south ends of the reservoir. Excavation work will proceed from west to east. Material used to construct the haul roads will be removed prior to refilling the reservoir. The removed material will either be temporarily stockpiled or used as fill material as part of undertaking proposed management actions. Material will be stabilized in accordance with practices described in section V.A.2 that provide details of sediment and erosion control practices that will be employed, and that will be included in stormwater pollution prevention plans (SWPPPs) developed for construction activities. Once excavation is complete, the outlet valve will be closed, and the reservoir will be allowed to gradually fill. This gradual filling should allow for the settling of solids that become suspended during pond refilling. Exposed soils will be mostly fine sands that will tend not to stay in suspension as

compared to silts or clays.

5. Wetlands

Potential Impacts

None of the new management actions proposed in the UMP Amendment will impact wetlands. Avoidance of wetland impacts in the areas of the grooming garage, the shuttle lane and the snowmaking reservoir was accomplished by field evaluation for the presence of wetlands and then designing these components to avoid wetlands. Periphery wetlands at the snowmaking reservoir will experience temporary hydrological alteration when the reservoir is emptied. This will not significantly impact wetlands since the effects will be temporary and since these wetlands have persisted when the reservoir has regularly been emptied in the past for inspection and maintenance purposes. Additional information regarding wetland avoidance can be found in Section 6, Alternatives.

Mitigation Measures

No significant adverse impacts have been identified, therefore, no mitigation measures are required.

6. Climate and Air Quality

Potential Impacts

No new permanent sources of air emissions are proposed as part of this UMP.

Gore Mountain Ski Center has a current NYSDEC Air Quality Permit for which they are compliant.

Construction activities that can take place after this UMP amendment is adopted may result in localized increases in dust levels. However, areas of proposed construction are located within the interior of the Intensive Use Areas, so no offsite areas will be affected.

Many ORDA venues exist within the boundaries of State protected lands and the impact of climate change on our environment is recognized. ORDA will be a leader in environmental stewardship with consistent commitment to sustainability, responsible development practices, and continuous communication with DEC, APA, and other regulatory agencies to ensure we are taking the appropriate measures.

Mitigation Measures

No significant adverse impacts have been identified, therefore, no mitigative measures are necessary.

B. Biological Resources

1. Vegetation

Potential Impacts
See **Figure** 32, Vegetation and Management Actions.

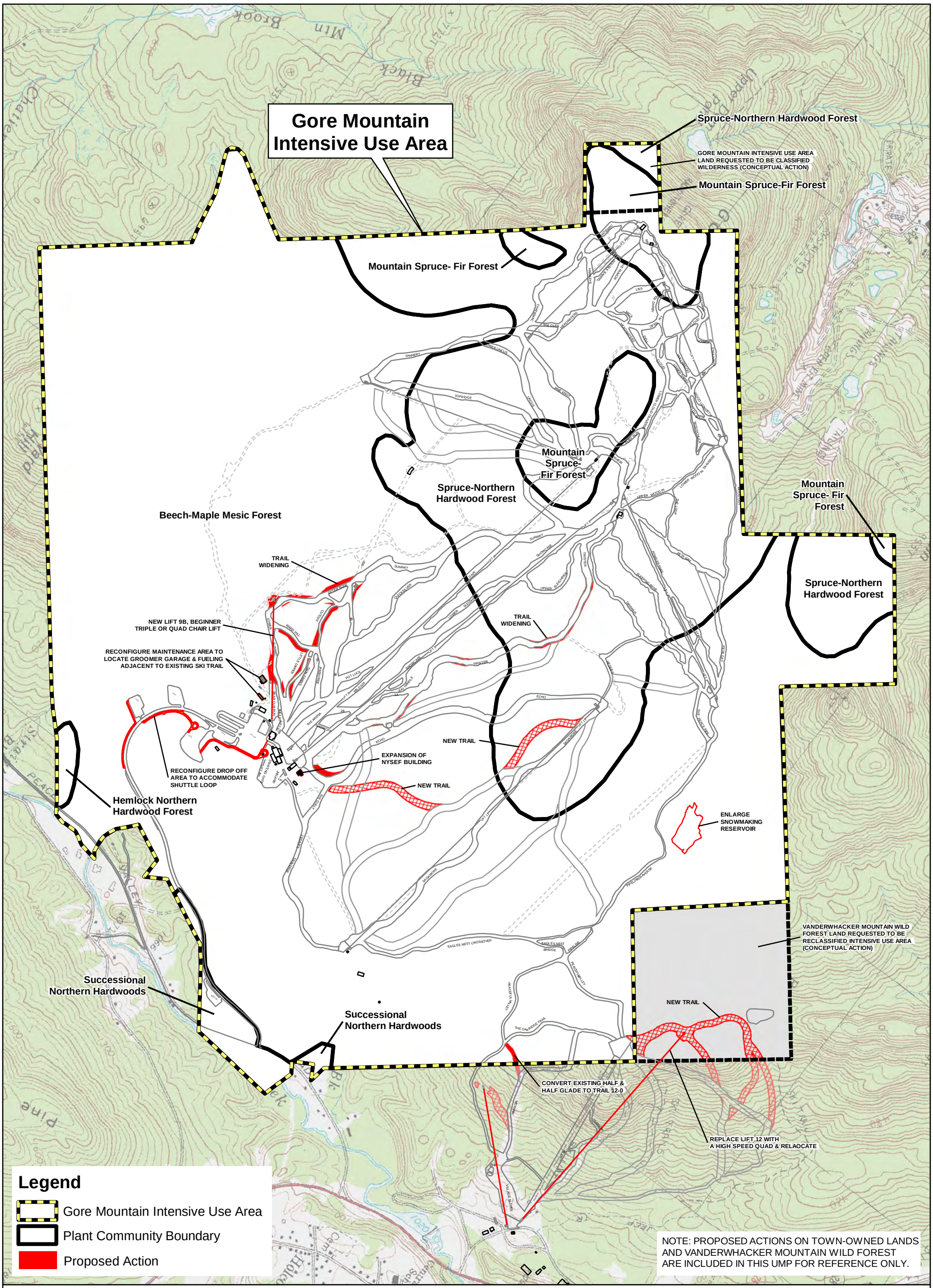
Tree clearing associated with the new management actions includes 18.1 acres for downhill ski trails (9.4 on the current Intensive Use Area lands and 8.7 acres in the lands that would be added from the VMWF reclassification (conceptual), 9.2 acres for trail widening, 3.1 acres for ski lifts, 0.8 acres for the groomer garage, and 6.5 acres for the shuttle lane. An area around maintenance and Lifts 9A and 9B previously approved in 1995 is no longer proposed. The 7.3 acres of clearing in this area is no longer proposed.

Appendix 8 contains an accounting of the numbers of trees proposed to be cut. These data are summarized in **Table** 7 below.

Table 7
Tree Cutting by Location and Community Type

Location	Community	Action(s)	Acreage	Total Trees
Gore Mtn IUA	B (mixed hardwood)	Burnt Ridge Trail (partial)	4.2	1,565
Gore Mtn IUA	E (mixed hardwood)	Burnt Ridge Trail (partial) + Trails 11A, 1N-P	6.9	4,447
Gore Mtn IUA	Q (pioneer hardwood)	Twister Widening	1.1	415
Gore Mtn IUA	P (northern hardwood)	Various	15.4	3315
			SUBTOTAL	**9,742**
Land Reclassif. (conceptual)	E (mixed hardwood)	Lift 12 and Trails 12	10.2	6,574
			TOTAL	**16,316**

A total of 9,742 trees are proposed to be cut on lands that are currently classified as Intensive Use Area. Approximately 25% of these will be 3-4” dbh and the remainder will be >4” dbh.



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Lake Placid, New York 12946

GORE MOUNTAIN

Project Title:

Gore Mountain: 2018 Unit Management Plan Amendment & Final Generic Environmental Impact Statement

Drawing Title

Vegetation and Management Actions

1 inch = 1,500 feet

0 750 1,500

Feet

Date: 05/11/2018

Project No: 201537

Drawing No:

32

(Gore Mountain UMP documents, starting with the 1995 Update and Amendment (in Appendix 21), have used the 3-4” and >4” breakdown of trees to be cut.)
Activities shown on lands that could get added to the Intensive Use Area from VMWF (conceptual action) would require the cutting of 6,574 trees. Approximately 44% of these would be 3-4” dbh and the remainder would be >4” dbh.

To put these tree cutting numbers in perspective, the total amount of lands affected in the table above is 10.2 acres in the intensive use area which totals approximately 3,755 acres. The amount of affected land is less than 1% (0.7%).

There is no tree cutting proposed above 2,800 feet in elevation or in any areas of Mountain Spruce-fir forest.

All tree cutting will be done in compliance with the DEC tree cutting policy LF-91-2.

No rare, threatened or endangered plant species will be impacted.

Mitigation Measures

Only areas absolutely necessary for construction of ski trails, ski lifts, and other proposed improvements will be cleared of vegetation. All other areas will be maintained in a natural state.

Erosion control measures will be used on cleared areas with disturbed soils to avoid affecting adjacent vegetation by erosion or siltation. Erosion-control devices to be used will include filter fabric fences and staked straw bale filters.

Upon the completion of clearing of new ski trails and ski lift corridors, they will be seeded with grass mixtures to promote rapid revegetation. Areas disturbed for any other improvements will also be landscaped and revegetated as soon as practicable.

Plants used to revegetate disturbed areas and planted as part of landscaping will be species which are indigenous to the region.

No clear-cutting of trees to develop panoramic views is proposed. Views will be framed or filtered by existing vegetation.

Continue to train staff working at Gore Mountain unit to identify and document the location of key invasive plant species.

Work towards a complete comprehensive inventory of the presence and extent of invasive plants in the unit.

Eliminate any identified populations of invasive plant species that are discovered in the unit.

These actions may be carried out by DEC personnel or by members of APIPP or other volunteers under supervision of DEC through an Adopt-a-Natural Resource Agreement.

All equipment brought onto the site for earth moving, grading or excavating shall be washed off-site with high pressure hoses and hot water prior to being brought onto the site. The contractor shall provide Certifications of Washing to the SWPPP Qualified Inspector before such equipment can be used on site. The SWPPP Qualified Inspector will have the authority to refuse the off-loading of any earthwork equipment brought onto the site that they determine to be not sufficiently cleaned.

2. Wildlife

Potential Impacts

The actions proposed in this UMP are expected to have minimal impacts on wildlife. Proposed management actions are spread over the landscape of the existing developed ski trails and lifts. New management actions are proposed at low elevations on the mountain.

Trail widening projects, including the green trails, involve existing trails. This will result in the loss of some currently treed areas along the edge of existing ski trails and move the forest edge slightly outward.

Replacing and relocation the Sunway Lift will occur in the immediate vicinity of the existing lift.

The new lift 9B will parallel the existing Lower Sunway trail and much of it will occur in an already cleared area.

Enlarging the snowmaking reservoir will entail converting 1.6 acres of shoreline wooded areas to open water.

The new groomer garage will require some tree removal in an area that has existing work roads on two sides and an existing ski trail on a third side.

The NYSEF building expansion will occur in a grassy area immediately adjacent to the existing building.

The improvements associated with the dedicated shuttle lane take place in and around existing parking areas and the existing access road and will have minimal wildlife habitat impact.

Mitigation Measures

No significant adverse impacts have been identified, therefore, no mitigation measures are required.

3. Fisheries

Potential Impacts
The only proposed management action that involves aquatic resources is the expansion of the snowmaking reservoir.

Significant adverse impacts to fisheries resources are not expected to occur as a result of reservoir drawdown for construction of the expansion. There may be some temporary short-term impacts to the fisheries resource within the reservoir proper, but these resources have developed and persisted while the reservoir is regularly drained for inspection and maintenance activities. Downstream fisheries will not be impacted since water will continue to pass through the pond as described previously above and in Section 4.

Mitigation Measures
See the earlier section entitled Water Resources for a description of how the flow of clean inflow through the pond will be maintained in the snowmaking reservoir during the expansion process. The same section describes how the reservoir will be allowed to fill gradually after expansion is complete in order to allow for settling out of suspended solids within the reservoir before the reservoir begins to flow over the spillway.

4. Unique Areas

Potential Impacts
There are no unique biological areas present.

Mitigation Measures
No significant adverse impacts have been identified, therefore, no mitigation measures are required.

5. Critical Habitat

Potential Impacts
See **Figure** 33, Potential Bicknell's Thrush Habitat and Management Actions. No new management actions are proposed to occur above 2,800 feet in elevation. There will no impact to the Adirondack Sub Alpine Forest Bird Conservation Area.

Mitigation Measures
Any carryover actions from previous UMPs that require construction activities above 2,800 feet in elevation will not commence prior to August 1 of any year.

GORE MOUNTAIN INTENSIVE USE AREA LAND REQUESTED TO BE CLASSIFIED WILDERNESS (CONCEPTUAL ACTION)

TRAIL WIDENING

NEW LIFT 9B, BEGINNER TRIPLE OR QUAD CHAIR LIFT

RECONFIGURE MAINTENANCE AREA TO LOCATE GROOMER GARAGE & FUELING ADJACENT TO EXISTING SKI TRAIL

RECONFIGURE DROP OFF AREA TO ACCOMMODATE SHUTTLE LOOP

EXPANSION OF NYSEF BUILDING

NEW TRAIL

TRAIL WIDENING

NEW TRAIL

ENLARGE SNOWMAKING RESERVOIR

VANDERWHACKER MOUNTAIN WILD FOREST LAND REQUESTED TO BE RECLASSIFIED INTENSIVE USE AREA (CONCEPTUAL ACTION)

NEW TRAIL

CONVERT EXISTING HALF & HALF GLADE TO TRAIL 12-0

REPLACE LIFT 12 WITH A HIGH SPEED QUAD & RELAOCATE

Legend

- Gore Mountain Intensive Use Area
- Mountain Spruce-Fir Forest
- Elevation Greater than 2,800'
- Proposed Action

NOTE: PROPOSED ACTIONS ON TOWN-OWNED LANDS AND VANDERWHACKER MOUNTAIN WILD FOREST ARE INCLUDED IN THIS UMP FOR REFERENCE ONLY.

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GORE MOUNTAIN

Project Title:

Gore Mountain: 2018 Unit Management Plan Amendment & Final Generic Environmental Impact Statement

Drawing Title

Potential Bicknell's Thrush Habitat and Management Actions

1 inch = 1,500 feet

0 750 1,500

Feet

Date: 05/11/2018

Project No: 201537

Drawing No:

33

C. Human Resources

1. Visual Resources

Potential Impacts

The actions proposed in this UMP are expected to have minimal visual impacts. The existing ski area is already visible from some area roadways. Proposed actions are spread across the landscape of the existing developed ski trails and lifts. New management actions are proposed at low elevations on the mountain.

Trail widening projects involve existing trails. For any trails that are currently visible from off site, the visual effect of minor widenings will be essentially imperceptible.

Replacing and relocating the Sunway Lift will occur in the immediate vicinity of the existing lift.

The new lift 9B will be low on the mountain and will parallel the existing Lower Sunway trail. The widening of the green trails will occur at low elevations not visible from off site.

The snowmaking reservoir is not visible from outside the Intensive Use Area.

The new groomer garage will be located in a low elevation wooded area. Although it will be visible on-site, it will not be visible from off site

The NYSEF building is not visible from off site.

The improvements associated with the dedicated shuttle lane take place in and around existing parking areas and the existing access road that are not visible from off site.

Mitigation Measures

No significant adverse impacts have been identified, therefore, no mitigation measures are required.

2. Transportation

Potential Impacts

The proposed management actions do not include any significant expansion of mountain facilities, such as the addition of a new pod of ski trails, that would result in significant increases in peak hour traffic generation.

Mitigation Measures

No significant impacts have been identified, therefore, no mitigation measures are required.

3. Community Services

Potential Impacts

The project primarily involves improvements to existing facilities designed to retain the existing skier base and increase the future number of skiers, hikers and bikers at Gore Mountain. It is anticipated that there will be a minor incremental increase in demand for community services such as fire, police, rescue, solid waste and health care due to the gradual increase in the number of visitors to the mountain. Many of the improvements are designed to build visitation during the off-seasons of spring, summer and fall thereby distributing the potential impacts over a 12 month period. The Ski Center presently makes very little demand on most services and the increase in such demand is anticipated to be small and can be accommodated by the service providers.

The North Creek Health Center was developed, and the Warrensburg Health Center was recently expanded to respond to the growing need for services in local communities and businesses in the region. The potential long-term and incremental increase in visitors may increase the demand for medical care slightly and these facilities are capable of meeting any increased demand. The Glens Falls Hospital is also prepared to handle a minor increase in patients to the emergency room.

The extra revenue derived from EMS calls from skiers, hikers and mountain bikers helps offsets the year-round costs and therefore has a positive impact on the people who live and pay taxes in Johnsburg.

Mitigation Measures

No mitigation measures are necessary since no negative impacts have been identified.

4. Local Land Use Plans

Potential Impacts

The actions in the UMP Update are consistent with local planning documents including the 2005 Johnsburg Comprehensive Plan and the 2007 Town of Johnsburg Zoning Law/LLUP that serve to guide community planning. Both documents seek to forge stronger links between the Gore Mountain Ski Resort, the North Creek Ski Bowl, and the hamlet of North Creek, all of which are goals of Gore Mountain, ORDA and this UMP Amendment.

The UMP Amendment contains specific actions designed to encourage skiers to use both ski areas thereby increasing the overall number of skiers at both Gore Mountain and the Ski Bowl. ORDA has cooperated with North Creek in developing hiking, cross-country ski and mountain bike trails with the goal of connecting Ski Bowl Park and Gore Mountain lands.

The actions on State land authorized by this UMP Amendment will not have any effects on adjoining or nearby private lands inconsistent with local land use controls such as the Johnsburg Zoning Law and the North Creek Action Plan that serve to guide community planning. The districts and densities outside of the hamlet are exactly matched to the official APA Land Use Map. Gore Mountain Ski Center is entirely within the Intensive Use Area which was created intentionally for such a special use. Both documents seek to forge stronger links between the ski center and community, which are also goals of ORDA and this UMP Update.

While the improvements and expansion of skier facilities on the mountain will not directly affect planning and zoning in the community, it will create the potential for new skiers who will require services in and around the hamlet of North Creek and some may choose to buy or build a second home in the area. Linkage and added amenities at Gore Mountain and Ski Bowl will also stimulate additional skier visits to the area and ultimately increase the number of consumers at local businesses. These are potential positive impacts for the local economic base and will serve to stabilize certain businesses, expand some businesses and create new businesses.

Mitigation Measures
No mitigation measures are necessary since no negative impacts have been identified.

5. Historical and Archaeological Resources

Potential Impacts
Appendix 3 contains a November 9, 2017 letter from NYS Office of Parks Recreation and Historic Preservation stating that there will be no impacts to archeological or historic resources.

Mitigation Measures
No mitigation measures are necessary since no negative impacts have been identified.

SECTION VI ALTERNATIVES

A. Alternative Trail Improvements

There are limited alternatives to the trail construction and trail widening proposed within this UMP Amendment.

When evaluating potential trail connections that would provide an alternative intermediate route from Burnt Ridge back to the Base Area on days when Echo is closed due to ski racing, three (3) separate alternatives were considered before determining the preferred route. The first alternative considered starting the new trail from the top part of Echo on skiers left, then running it generally parallel to Echo before connecting back to Echo at the bottom where the trail turns north into the base area. This alternative was not pursued primarily due to the frequency of steep and difficult terrain. The terrain was not suitable as intermediate terrain and would have resulted in extensive construction efforts to achieve a desired grade and alignment.

The second alternative considered starting the new trail from the top part of Echo, on skier's right at the first bend, then running southeast and connecting to Twister. While the terrain in this area was suitable as intermediate terrain with appropriate construction efforts, the trail would not have been able to be open on days where ski race training was occurring on Twister, which closes Twister to the skiing public. As a result, this trail would not have provided a reliable intermediate connection from Burnt Ridge to the Base Area, and the length of new trail would've been shorter than desired, providing only a short section of new skiing terrain.

The third and preferred alternative connects from the top of Sagamore on skier's right, and continues southeast to the bottom of Echo where it turns towards the base area. This alternative was selected due to the suitability of terrain as intermediate terrain, the ability to connect to and utilize a previously approved trail (not yet constructed), that provides an option to ski back to the bottom of Burnt Ridge, the length of new skiing terrain offered by this alignment, and ability to provide the desired connection from the top of Burnt Ridge back to the base area on days when Echo is closed due to racing.

B. Alternative Lift Configurations

The expanded beginner terrain could conceivably be served by just the replacement and relocation of the Sunway Lift (lift 3) with the addition of the new lift 9B.

The relocated Sunway lift, in and by itself, could continue to serve the existing beginner terrain along with those beginner trail improvements proposed in this UMP Amendment. However, beginner skiers would still be faced with terrain that they may find too challenging. As discussed previously in this document, skiers that offload at the top of the Sunway Lift, even though it is being relocated primarily for skier safety reasons, need to begin skiing on more challenging (steeper) terrain than what is present lower on the Sunway trails.

By providing the new Lift 9B which offloads lower on the mountain, the beginning skier has the option of choosing this lift as the first one they ride, as opposed to using the Sunway lift. By using Lift 9B and skiing the easier terrain on Lower Sunway, beginning skiers can then gain confidence and experience that they may otherwise need to ski the terrain served by the higher up Sunway Lift.

C. Alternative Parking/Circulation Improvements

An alternative to the currently proposed shuttle system was proposed in the 2005. The currently proposed shuttle route involves less construction in currently wooded areas and would be less impacting than the alternative proposed in 2005. The 2005 alternative include more "overland" travel between the parking lots and the base lodge than what is currently proposed. The current alternative more closely follows the existing access roads and perimeters of the existing parking lots.

D. Alternative Appurtenances

The primary new management action appurtenances in this UMP Amendment are the relocated groomer garage and an expanded snowmaking reservoir.

Groomer Garage

The alternative of locating the new garage to the east and downhill of the existing work road, which would place it slightly closer to the existing maintenance complex, was examined. Field study showed that there are wetlands and some surface waters south of the work road which make this alternative location undesirable.

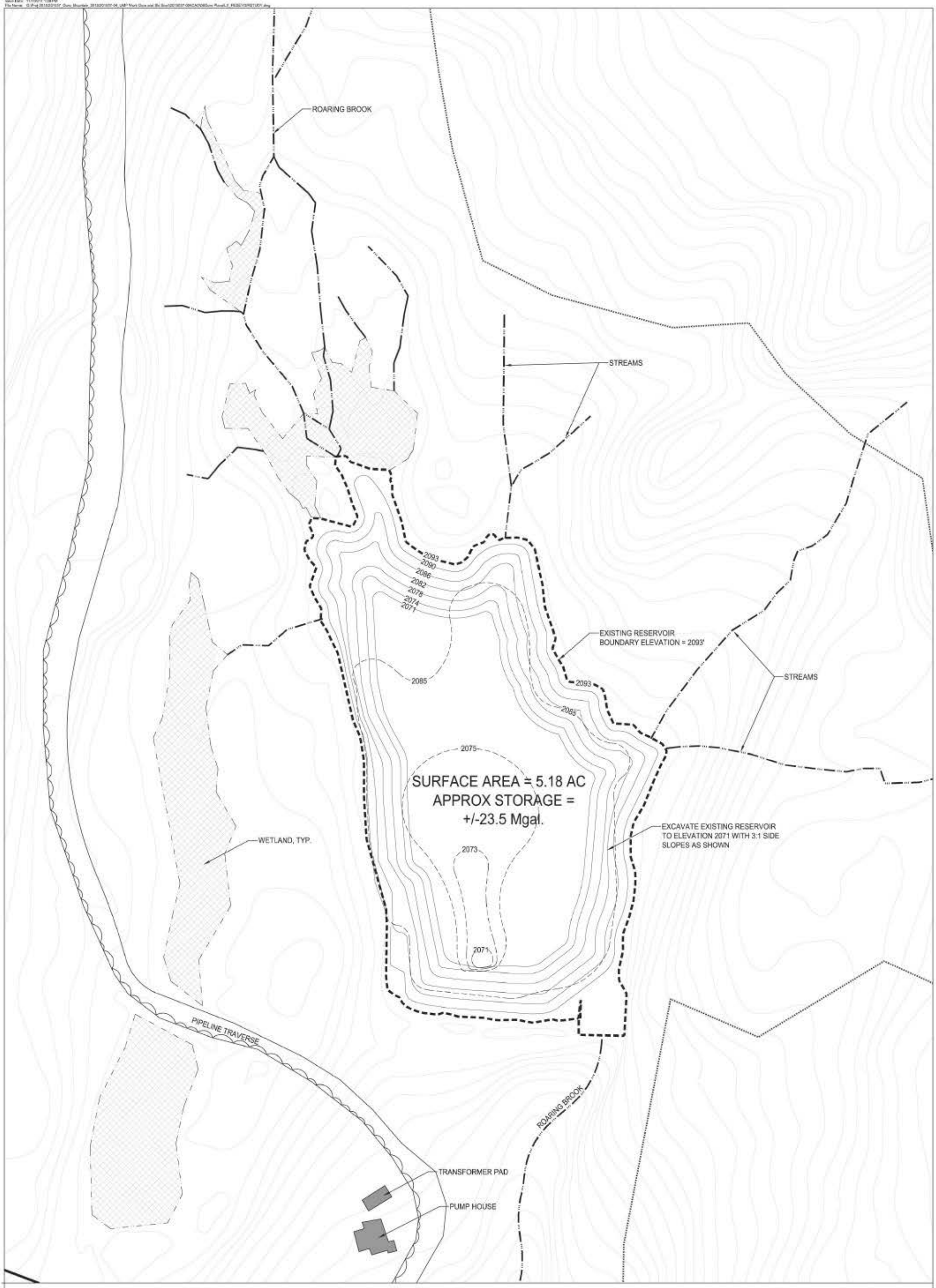
The alternative of locating the groomer garage a little more to the south was also examined in the field. This area has slightly steeper and irregular topography in comparison to the proposed location. This would likely result in a greater area of site disturbance in order to construct the garage. This alternative location would also increase the overall footprint of the maintenance complex which would result in a slight decrease in operational efficiency.

Snowmaking Reservoir

Figures 34 through 39 illustrate the options (alternatives) that were evaluated. Each alternative is described below.

The existing snowmaking reservoir covers approximately 5.2 acres with approximately 19 Mgal of storage.

Alternative 1 (**Figure** 34) involves maintaining the existing 5.2 acre foot print and grading the reservoir sideslopes to all be 3:1. This would increase the storage capacity by 4.5 Mgal to 23.5 Mgal.



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GORE MOUNTAIN

Project Title:
Gore Mountain: 2018 Unit Management Plan Amendment & Final Generic Environmental Impact Statement

Drawing Title:
Snowmaing Reservoir Expansion- Alternative 1

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Scale:	1"=60'
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Drawn:	KMK
Chk'd:	KJF
Project No.:	2015037

Drawing No:
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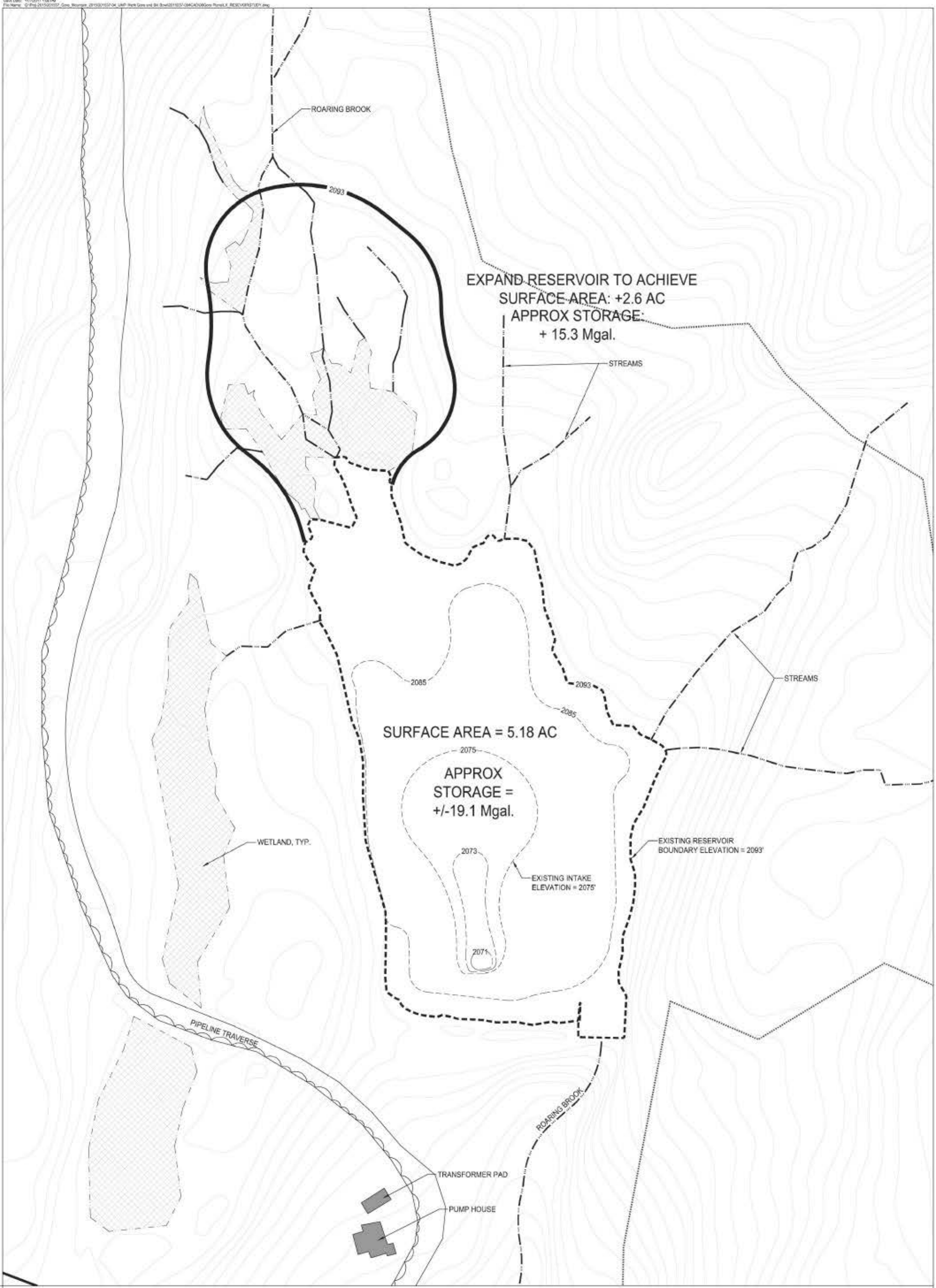

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Drawing Title
Snowmaking Reservoir Expansion - Alternative 2

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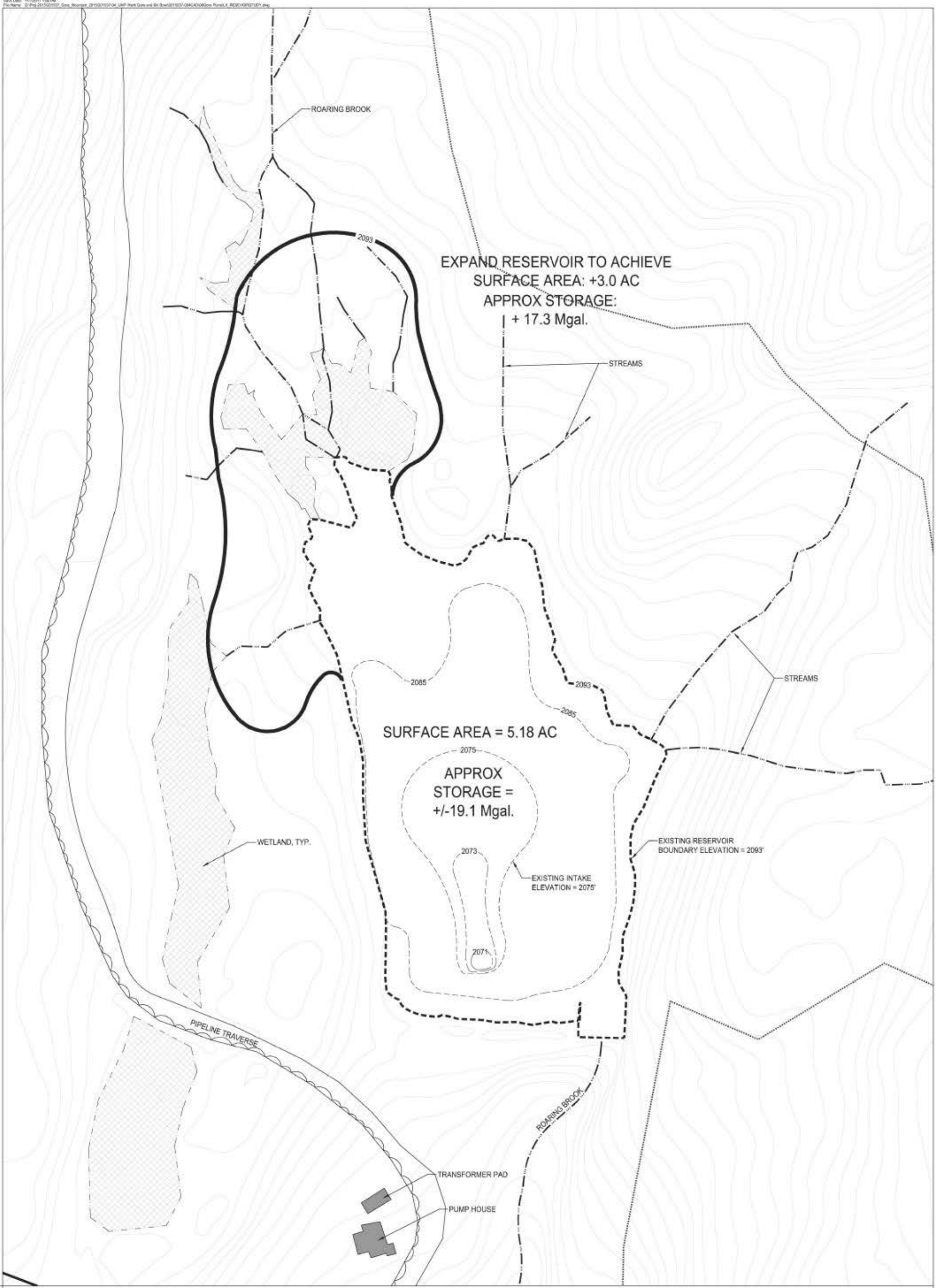

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Drawing Title:
Snowmaking Reservoir Expansion - Alternative 3

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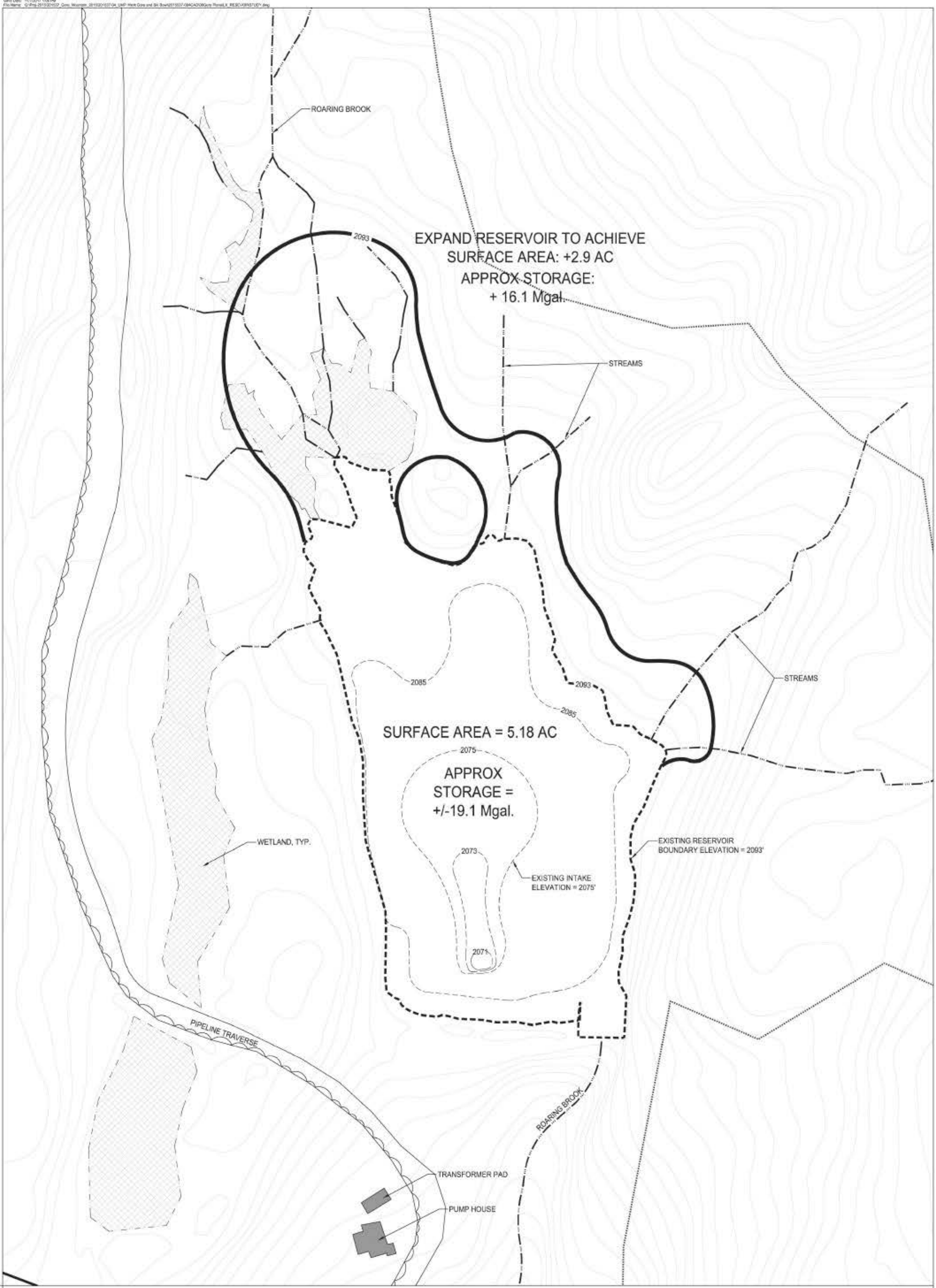

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Project Title:

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Drawing Title:

Snowmaking Reservoir Expansion - Alternative 4

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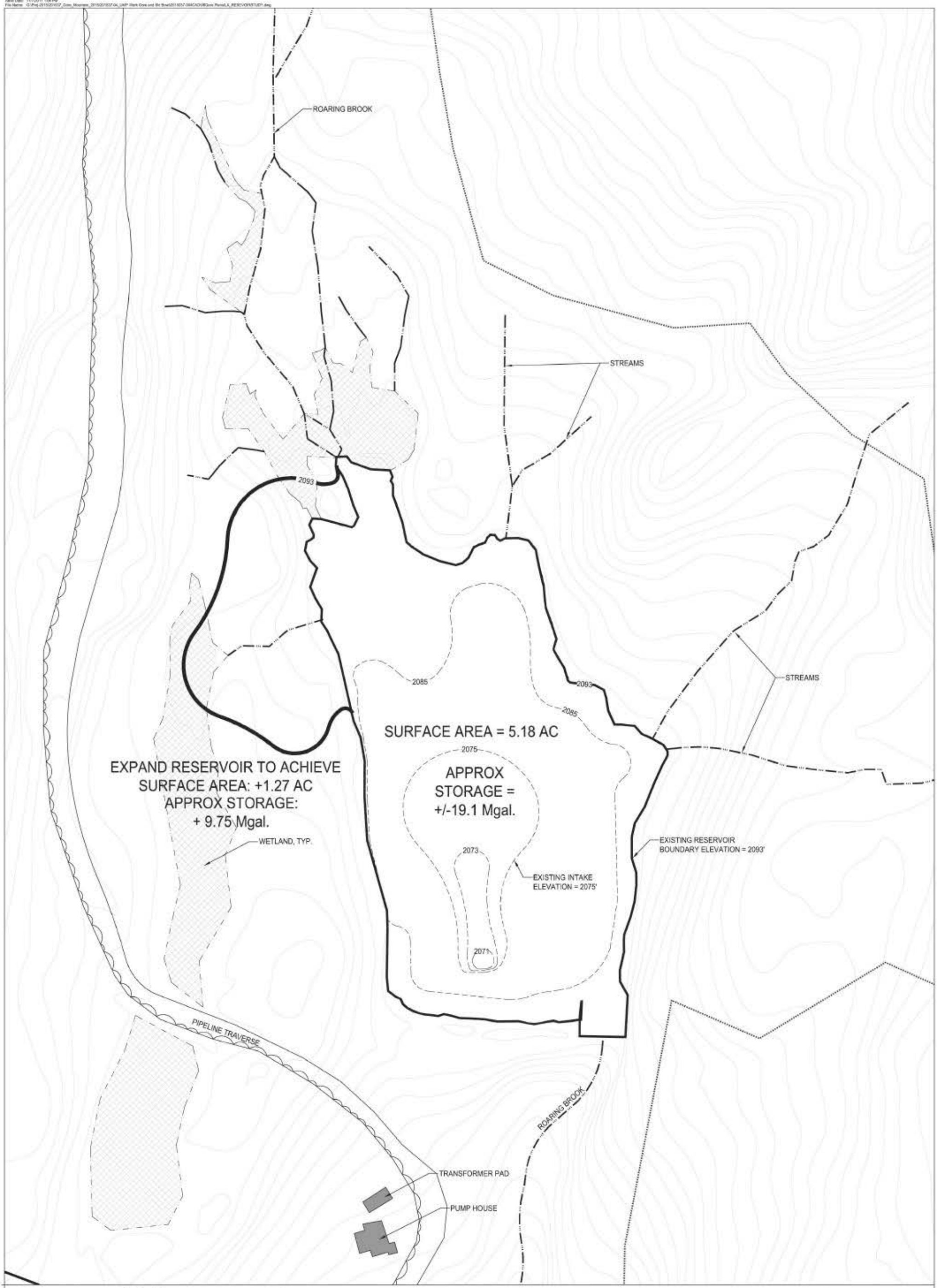

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Project Title:

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Drawing Title:

Snowmaking Reservoir Expansion- Alternative 5

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Date:	November 6, 2017
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Project No.:	2015037

Drawing No:

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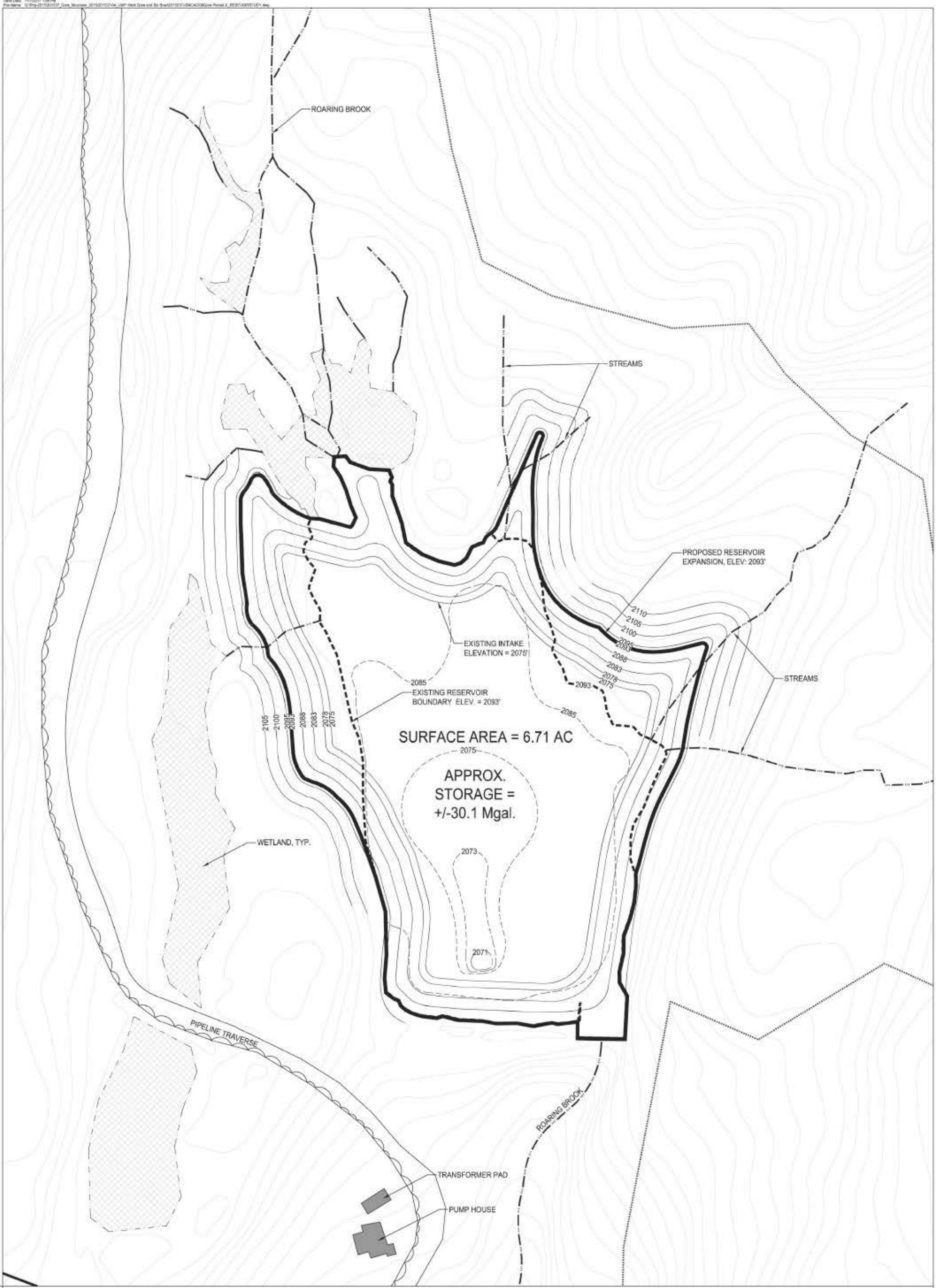

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Drawing Title:
Snowmaking Reservoir Expansion - Alternative 6

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Date:	November 6, 2017
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Design:	MJT
Drawn:	KMK
Chk'd:	KJT
Project No.:	2015037

Drawing No:
39

Alternative 2 (**Figure** 35) involves the 3:1 slopes from Alternative 1 and expanding the pond to the west in the area of the primary inlet. This would be the one of most "constructable" alternatives. This expansion would have increased the reservoir surface by approximately 2.6 acres and added an additional storage volume of 15.3 Mgal for a total reservoir volume of 38.8 Mgal, close to the desired 40 Mgal. However, as shown on **Figure** 35, this alternative would require some extensive material alteration to the wetlands delineated around the reservoir.

Alternative 3 (**Figure** 36) is a variation on Alternative 2 and would have involved additional expansion in the southwest corner of the reservoir. This alternative would provide to 40.8 Mgal of storage, but would continue to require material alteration of wetlands.

Alternative 4 (**Figure** 37) is another variation on Alternative 2 and would have involved additional expansion in the northwest portion of the reservoir. The results would have been a storage capacity of 39.6 Mgal and material alteration of wetlands.

Alternative 5 (**Figure** 38) is a variation of Alternative 2 that only involves the expansion on the northwest corner of the reservoir. Storage volume would be 33.3 Mgal, it would avoid the wetlands in the main inlet area, but there are wetlands separate from and to the south of the reservoir that would be affected.

Alternative 6 (**Figure** 39) is a variation on Alternatives 1, 3 and 4. Under this alternative the storage volume would be increased to 30.1 Mgal and material alteration of wetlands is avoided.

E. The No-Action Alternative

If the no-action alternative were pursued, none of the new management actions proposed in this UMP Amendment would be given consideration. Any management actions approved in earlier adopted UMPs, but not yet constructed/implemented, could remain in effect and can continue to be implemented.

The no-action alternative could mean that the following goals set by ORDA for Gore Mountain may not be attainable:

- Gore Mountain will seek to modernize facilities at Gore in order to enhance the guest experience, improve skier safety, and increase local and regional economic benefits, while maintaining environmental quality.

- Gore Mountain will seek to increase the capacity of the ski area in concert with other modernization objectives in order to provide a higher quality skiing experience.

- Gore Mountain will seek to improve its economic return by making the mountain more attractive to skiers, and thus increasing ticket sales.

- Gore Mountain will seek to improve skier safety and enjoyment by widening certain trails and improving certain trail intersections.

- Gore Mountain will seek to improve trail selection and create a better balance among trails in order to appeal to a greater cross-section of the skiing market by increasing the number of trails for the beginning and advanced skier.

- Gore Mountain will seek to develop new summer and fall usage of the Ski Center to provide greater year-round use of the facility by the public, consistent with Article 14 and the APSLMP.

- Gore Mountain will implement a capital improvements program to achieve the above objectives.

- Gore Mountain will seek to improve infrastructure reliability in order to reduce the high frequency of breakdown, excessive staffing requirements and consequent financial drain.

- Gore Mountain will seek to reduce its operations and maintenance costs by replacing outdated and aged equipment.

SECTION VII SUMMARY OF UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

Some of the potential environmental impacts of the proposed project cannot be prevented or reasonably avoided.

7.1 Construction Phase

Construction activities inevitably result in temporary impacts including: visual, noise, vibrations, dust, fumes and odors.

During construction, while vegetation is disturbed there is an increased risk of erosion during stormwater events and a resulting adverse impact in surface water quality. As a result, the water quality in nearby receiving waters may be impacted during the course of construction due to possible erosion of excavated areas. Preparation of project-specific Stormwater Pollution Prevention Plan (SWPPP) for construction activities using the mitigation measures described in Section V.A.2 will minimize these impacts.

Construction will involve clearing of vegetation for the construction of trails, buildings, shuttle lanes and other proposed facilities. Clearing results in habitat loss that could increase runoff and adversely impact wildlife. (See Section 2 for an explanation of the Environmental Setting, and Section 5 for Potential Impacts and Mitigation Measures.) While there will be tree cutting required for ski trails, tree cutting is minimized to the extent feasible and the footprint of the proposed trails are within State constitutional limits.

There may be a localized impact to air quality from dust during construction, however, this potential impact will be temporary and will not extend outside of the Intensive Use Area.

7.2 Operational Phase

There will be an incremental increased use of surface water resources for snowmaking water supply. Previous UMP studies have demonstrated that the Hudson River source capacity can easily provide additional water without any significant adverse impacts.

Wildlife may be impacted as a result of permanent removal of vegetation. As previously stated, tree cutting required for the construction of new ski trails and for trail widening is within constitutional limits.

Slightly increased attendance and operational activities as a result of the project will cause a corresponding slight increase in traffic levels, but peak hour traffic is not expected to significantly increase. The use of the shuttle system could also possible counteract slight increases in attendance by extending the duration of arrival and departures thus reducing peak traffic levels.

SECTION VIII IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The extent to which a proposed action may cause permanent loss of one or more environmental resources should be identified as specifically as possible based upon available information. Resources which should be considered include natural and man-made resources that would be consumed, converted or made unavailable for further uses due to construction, operation, or use of the proposed project, whether those losses would occur in the immediate future, or over the long term.

The management actions contained in this UMP Amendment do not involve any significant, irreversible or irretrievable commitment of natural resources under the footprint of the proposed new or widened ski trails or the new or relocated ski lifts. The footprint of the new groomer garage and expansion of the NYSEF building represent a small commitment of these areas to built structures.

Site work would involve the removal of existing vegetation and would disturb on-site soils. It is not believed that such impacts are significant. No rare, threatened or endangered species are known to inhabit the site.

There would be a commitment of raw materials for construction of the structures, including concrete, steel, gravel, and wood. Energy resources would be required for the construction, operation and maintenance of the expanded facility.

SECTION IX GROWTH INDUCING, SECONDARY AND CUMULATIVE IMPACTS

This section evaluates the effects of the proposed ski area improvements as they relate to the potential for such improvements to stimulate secondary impacts including an increase in local population, demand for support facilities and commercial and residential development. These secondary impacts would occur if the economic stimuli from the project generated economic activity that would result in significant growth in local populations, labor pools or demands on local services which is not expected to occur.

While the economic effect of the proposed management actions is expected to be positive, growth inducing and secondary impacts are expected to be minimal. The proposed management actions are not geared towards significantly increasing attendance at Gore Mountain. Instead, the proposed improvements are aimed retaining existing skiers and at enhancing beginner facilities to introduce more people to skiing and snowboarding and hopefully recruiting new future participants in the sports at Gore Mountain. Other improvements are geared to improving existing guest services and improving mountain operations which are not necessarily intended to cause significant increases in attendance. Spending in the local community by an increased number of patrons will provide a positive economic stimulus, but since most of the skiers will be day-visitors, the level of spending would not result in the increase in local business that occurred after the major expansion from the activities included in the 1995 UMP.

The proposed project may have some minor influence on the second home market in the nearby towns. The improvements at the Ski Center may improve the desirability of second homes in the area. This increase in desirability may translate to a slight increase in demand for, and price of, vacation homes in the area. However, this increase in demand is expected to be very minor because the Ski Center has already been in operation for many years and the incremental change in recreational facilities as a result of this project will be relatively small.

ORDA is currently contemplating simultaneous improvements on Town of Johnsburg owned lands at the North Creek Ski Bowl, outside of the Intensive Use Area. Because these actions are not within the Intensive Use Area, they are not covered within this UMP Amendment. Instead, these actions will be subject to APA review under section 814 of the Adirondack Park Agency Act and also subject to review under SEQRA. In order to make the requisite assessment of cumulative impacts, this UMP Amendment/GEIS is accompanied by two companion documents which will be referred to as Part B and Part C (Part A being the UMP/GEIS). Part B is the Notice of Intent to the APA required under section 814 APA Act, including accompanying SEQRA documentation. Part C is the cumulative impact assessment of the actions proposed within the Intensive Use Area and the actions proposed at the Ski Bowl.

SECTION X EFFECTS ON THE USE AND CONSERVATION OF ENERGY

Recent past activities and future activities being undertaken at Gore Mountain will have a positive effect on the use and conservation of energy.

In the construction phase, additional energy will be consumed primarily in the form of fossil fuels to power the required construction equipment and to transport construction workers to and from the site. This will result in a temporary increase in the use of energy.

Gore is contracting two 25-year solar power purchase agreements, which combine into a massive 5.325 MW system. Using remote net metering, 85% of Gore's electrical is poised to be offset. In cooperation with Borrego Solar, Gore Mountain is efficiently harvesting sunlight for its energy needs, utilizing 14,589 ground-mounted solar panels across 20 acres of otherwise fallow farmland. The electricity generated credits Gore's meter at a rate higher than power that is traditionally produced, while providing a cleaner, more sustainable source of energy to its electric distribution zone. The agreement is projected to save Gore Mountain approximately $10 million over the life of the contract, while offsetting 113,919 tons of carbon dioxide, 71,634 pounds of nitrogen oxide emissions, and 131,835 pounds of sulfur. Gore's purchase agreement received support from Governor Cuomo's NY-Sun incentive through the New York State Energy Research and Development Authority (NYSERDA).

In June 2016 Gore Mountain issued a Sustainability Analysis a copy of which is in **Appendix** 9. This analysis contained a section on electricity and fuel, including the following.

Diesel is used for powering maintenance equipment, snowmaking compressors and grooming equipment and for operating ski lifts during power outages. Trucks and buses are also fueled by diesel. Off-road diesel use has been reduced significantly over the last 8 years and that trend will continue. On-road diesel has had a slight average increase over the past 8 years due, primarily, to an increase in vehicles, including the shuttle bus fleet which has been accommodating the growing number of guests. Gore is actively investigating modernization of existing fleets with new technologies including electric grooming machines and hybrid buses.

Gasoline is used to operate snowmobiles for ski patrol and snowmaking as well as vehicles for travel to trade shows, meetings and conferences. There has been a slight downward trend in gasoline use over the last 8 years.

Gore Mountain propane usage had a dramatic increase after the 2007/2008 fiscal year due to the addition of the Northwoods Lodge, conversion of the base lodge’s heat from fuel oil, and the addition of two more commercial kitchens. Propane is used to heat almost all of Gore Mountain’s buildings, with the exception of Saddle Lodge which uses a wood stove and electric heat. The usage trend for propane is relatively flat and primarily dependent on the weather. A green heat initiative is targeted for future improvement in propane use reduction.

While electricity powers the lifts at Gore Mountain, the largest use of it is for snowmaking compressors and pumps. Gore has substantially reduced the amount of kilowatt hours (kWh) used during the last four fiscal years and the plan is to maintain this trend by continuing to replace traditional snowmaking with modernized, high efficiency guns. Gore is also modernizing their compressors with improved, more efficient drives and changing most lighting to motion sensing and high efficiency bulbs or LEDs.